

REMARKS

This Amendment is filed in response to the outstanding Office Action, dated January 14, 2005. Claims 6, 16, and 26 are withdrawn. New Claims 31, 32, and 33 have been added. The claims now pending in the application are Claims 1-5, 7-15, 17-25, and 27-33. Reconsideration of the application, as amended, is respectfully requested.

The Examiner rejected Claims 1-5, 7, 8, and 10 under 35 U.S.C. § 102(b) as being anticipated by German Publication No. DE 198 29 124. This rejection is respectfully traversed.

Claim 1 as amended defines the invention as a valve seat assembly for a control valve of a vehicle brake system. The valve seat assembly includes a valve seat body having a valve passageway extending through a portion of the valve seat body. A groove is formed circumferentially in an outer surface of the valve seat body. A bore extends between the groove surface and the valve passageway to provide fluid communication between the groove surface and the valve passageway. A substantially resilient seal is slidably mounted about the groove surface. The seal is slidably movable between a first position substantially covering the bore and a second position exposing the bore to permit the flow of fluid within the groove to the valve passageway through the bore.

German Publication No. DE 198 29 124 discloses a pressure valve having a groove 2 formed around the outer periphery of a hollow cylinder 4. An elastic O-ring or square ring 3 is disposed in the groove to seal the flanks 5 of the groove 2. The groove 2 has a V-shaped or U-shaped cross-section. The ring 3 is movable to allow fluid to flow from the valve passageway within the hollow cylinder 4 through bores 7 into the groove 2. Therefore, German Publication No. DE 198 29 124 does not disclose a resilient seal that is slidably mounted about a groove surface as defined in amended Claim 1. Thus, it is believed that amended Claim 1, and Claims 2-5, 7, 8, and 10 depending from Claim 1 are patentable over the cited references.

The Examiner rejected Claims 1-5, 7, and 8 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,762,103 to Gregoire. This rejection is respectfully traversed.

The Gregoire reference discloses a check valve having an inlet body portion 10 containing an inlet passage 16. The inlet passages 16 are communicably connected to an annular groove 30 in the exterior of the inlet body portion 10. An O-ring 14 is disposed about the groove 30. The groove 30 is defined by edges 32, 34. A taper 40 extends outwardly and away from edge 34. Fluid flows from the inlet passage 16 through radial holes 28 into the annular groove 30. When the inlet pressure exceeds the outlet pressure, the O-ring 14 is moved away from the groove edge 34 by pivoting upward on edge 32 to allow fluid to flow from the annular groove 30 into an outlet cavity 20. See the Gregoire reference at col. 2, lines 57-66. Fluid does not flow from the groove 30 into the inlet passage 16. Therefore, the Gregoire reference does not disclose a resilient seal that is slidably mounted about a groove surface as defined in amended Claim 1. Thus, it is believed that amended Claim 1, and Claims 2-5 and 7-10 depending from Claim 1 are patentable over the cited references.

The Examiner rejected Claims 1-4, 9-14, 19-24, 29, and 30 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,019,441 to Lloyd et al. This rejection is respectfully traversed.

Claim 11 as amended defines the invention as a control valve for controlling fluid flow in a hydraulic control unit. The control valve includes a valve body having a first body portion and a second body portion adjacent the first body portion. A valve passageway is formed through the first and the second body portions. The second body portion includes a groove formed circumferentially in an outer surface thereof. The groove defines a groove surface. The second body portion includes a bore extending between the groove surface and the valve passageway to provide fluid communication between the groove surface and the valve passageway. A substantially resilient seal is slidably mounted about the groove surface. The seal is slidably movable between a first position substantially covering the bore and a second position exposing the bore to permit the flow of fluid within the groove to the valve passageway through the bore. An armature is slidably received in the valve bore of the first body portion. An electrical coil is disposed about the valve body for selectively inducing a magnetic flux in the armature.

Claim 21 as amended defines the invention as a hydraulic control unit (HCU) for a vehicle brake system. The HCU includes an HCU housing defining an HCU bore and a control valve mounted in said HCU housing. The control valve includes a valve body that includes a first body portion and a second body portion adjacent the first body portion and a valve passageway formed through the first and the second body portions. The second body portion includes a groove formed circumferentially in an outer surface thereof. The groove defines a groove surface. The second body portion also includes a bore extending between the groove surface and the valve passageway to provide fluid communication between the groove surface and the valve passageway. The second body portion further includes a substantially resilient seal is slidably mounted about the groove surface. The seal is slidably movable between a first position substantially covering the bore and a second position exposing the bore to permit the flow of fluid within the groove to the valve passageway through the HCU bore. An armature is slidably received in the valve passageway of the first body portion. An electrical coil is disposed about the valve body for selectively inducing a magnetic flux in the armature.

The Lloyd et al. reference discloses an apply valve 2 for a solenoid operated braking system. A stator 62 has a supply-side passageway 86 extending therethrough that is communicably connected to a brake-side passageway 88. A groove (near 102) is formed circumferentially in an outer surface of the stator 62. Referring to the Lloyd et al. reference at col. 4, lines 40-53, "fluid filters 100 and 102 are positioned on the stator 62 in the path of internal passages 88 and 86." The Lloyd et al. reference also states "a lip seal 104 disposed in the end of a passage 106 permits one-way fluid flow between the passage 106 and the supply line 12." It is not clear that either the "fluid filters" 100 and 102 or the "lip seal" 104 are movable. It is clear that the Lloyd et al. reference does not disclose a substantially resilient seal that is slidably mounted about a groove surface, the seal being slidably movable between a first position substantially covering the bore and a second position exposing the bore to permit the flow of fluid within the groove to the valve passageway through the bore, wherein the bore extends between the groove surface and the valve passageway, as is defined in Claims 1, 11, 21, and new Claim 33. Thus, it is

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believed that amended Claims 1, 11, 21, and 33 and Claims 2-4, 9, 10, 12-14, 19, 20, 22-24, and 29-32 depending respectfully therefrom, are patentable over the cited references.

For the above mentioned reasons, Applicants respectfully request withdrawal of the rejections of record. In view of the amendments and above remarks, it is believed that the application is in condition for allowance.

Any fees due in connection with this Amendment should be charged to Deposit Account No. 13-0005.